

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)	
)	
)	
PanAmSat Licensee Corp.)	File No. SAT-MSC-20100405-00117
)	
Petition for Specific Authority Under Section)	
25.161(c) for C and Ku-band Frequencies at the)	
Nominal 72° E.L. Orbital Location)	

MEMORANDUM OPINION AND ORDER

Adopted: March 9, 2012

Released: March 9, 2012

By the Chief, Satellite Division, International Bureau:

I. INTRODUCTION

1. By this Order, we find that Intelsat Licensee LLC (Intelsat), formerly PanAmSat Licensee Corp., has retained a replacement expectancy to operate a space station on certain C- and Ku-band frequencies at the nominal 72° E.L. orbital location, despite a brief gap in service from that location in 2010.¹ Intelsat re-established service from the nominal 72° E.L. orbital location seven months after its Intelsat 4 satellite unexpectedly failed in early 2010, and has taken steps to ensure continuity of service from this location since that time. Under these circumstances, we find that Intelsat should be able to continue to serve its existing customers using the 3700-4200 MHz, 5925-6425 MHz, 11.45-11.7 GHz, 12.5-12.75 GHz, and 14.0-14.5 GHz frequency bands. As a result, Intelsat may continue to operate in these frequency bands at this orbital location without being subject to competing applications.

II. BACKGROUND

2. In 2002, the International Bureau (Bureau) authorized Intelsat to operate the Intelsat 4 space station using C- and Ku-band frequencies at the 72° E.L. orbital location.² This satellite had been

¹ The Petition was filed by PanAmSat Licensee Corp., then a wholly owned subsidiary of Intelsat Holdings, Ltd. In December 2010, the Commission authorized various internal assignments and transfers that resulted in the majority of Intelsat's and its affiliated corporate entities, licenses and authorizations, including those held by PanAmSat Licensee Corp., being held by a single subsidiary company, Intelsat Licensee LLC. See IBFS File No. SAT-T/C-20101203-00253 (granted Dec. 23, 2010). For ease of reference, we will refer to the Petitioner as Intelsat.

² See Letter from Fern Jarmulnek, Deputy Chief, Satellite Division, International Bureau, FCC, to Joseph Godles, Counsel for PanAmSat Licensee Corp., IBFS File No. SAT-MOD-20010614-00052 (dated Dec. 20, 2002). Intelsat 4 was authorized to operate in the following frequency bands: 3700-4200 MHz, 5925-6425 MHz, 11.45-11.7 GHz, 12.5-12.75 GHz, 14.0-14.5 GHz, and 12.25-12.5 GHz.

launched in 1995.³ In January 2010, Intelsat 4 experienced a major technical anomaly. Intelsat completed its de-orbit of Intelsat 4 in March 2010.⁴ In April 2010, Intelsat filed a “Petition for Specific Authority under Section 25.161(c),” seeking authority to leave the nominal 72° E.L. orbital location vacant until it could relocate its Intelsat 706 space station to 72° E.L. in August 2010.⁵

3. The Intelsat 706 space station commenced service at 72.10° E.L. in August 2010, first through a series of grants of special temporary authority, and later through a grant of regular authority.⁶ Intelsat placed Intelsat 706 into inclined orbit earlier than anticipated. In April 2011, Intelsat filed a modification application seeking authority to move the Intelsat 709 space station from 54.85° W.L. to 72.10° E.L. to ensure continuity of service.⁷ Both Intelsat 706 and Intelsat 709 are currently operating at the nominal 72° E.L. orbital location.⁸ In the grants for both the Intelsat 706 and Intelsat 709 space stations, the Bureau stated that the grants were without prejudice to any decision with respect to Intelsat’s replacement expectancy at the nominal 72° E.L. orbital location. In September 2011, Intelsat filed an application for authority to launch and operate the Intelsat 22 space station at 72.10° E.L.⁹ Intelsat expects to launch Intelsat 22 in the first quarter of 2012. This application is pending.

³ The Bureau initially authorized Intelsat to operate Intelsat 4 at 68° E.L. See PanAmSat Licensee Corp., *Memorandum Opinion, Order, and Authorization*, 10 FCC Rcd 9928 (Int’l Bur. 1995).

⁴ See IBFS File No. SAT-STA-20100205-00022, requesting special temporary authority to conduct emergency operations (granted with conditions Mar. 8, 2010); IBFS File No. SAT-STA-20100212-00026 (granted with conditions Feb. 27, 2010); and IBFS File No. SAT-STA-20100224-00035 (granted with conditions Mar. 13, 2010). See also Letter to Marlene H. Dortch, Secretary FCC, from Susan H. Crandall, Assistant General Counsel, Intelsat Corporation (March 20, 2010) (Intelsat 4 successfully de-orbited March 3, 2010).

⁵ See IBFS File No. SAT-MS-C-20100405-00117. PanAmSat’s Petition was placed on Public Notice. Policy Branch Information, *Public Notice*, Report No. SAT-00699 (June 18, 2010). No comments were received in response to the Notice.

⁶ Intelsat North America LLC, IBFS File No. SAT-MOD-20100511-00098 (regular grant; granted with conditions Mar. 22, 2011). Intelsat 706 is authorized to operate on the following frequencies: 3700-4200 MHz (space-to-Earth), 5925-6425 MHz (Earth-to-space), 10.95-11.2 GHz (space-to-Earth), 11.45-11.70 GHz (space-to-Earth), 12.50-12.75 GHz (space-to-Earth), and 14.0-14.5 GHz (Earth-to-space) frequency bands. See IBFS File No. SAT-STA-20100824-00181 (granted Sept. 7, 2010), with extensions granted in IBFS File No. SAT-STA-201022-00223 (granted Nov. 9, 2010); IBFS File No. SAT-STA-20101220-00265 (granted Jan. 6, 2011); and IBFS File No. SAT-STA-20110222-00031 (granted Mar. 3, 2011).

⁷ Intelsat Licensee LLC, IBFS File No. SAT-MOD-20110428-00081 (granted July 27, 2011). In May 2011, the Bureau granted Intelsat special temporary authority for telemetry tracking and control operations necessary to drift Intelsat 709 to 72.10° E.L. See IBFS File No. SAT-STA-20110512-00089 (granted with conditions May 24, 2011). Intelsat 709 is authorized to operate on the same frequency bands as Intelsat 706, see note 6.

⁸ See Letter to Marlene H. Dortch, Secretary FCC, from Susan H. Crandall, Intelsat Corporation (July 20, 2011), notifying the Commission that Intelsat 706 has commenced inclined orbit operations.

⁹ See Intelsat Licensee LLC, IBFS File No. SAT-LOA-20110929-00193. We placed the application on Public Notice on January 13, 2012. Policy Branch Information, *Public Notice*, Report No. SAT-00835 (Jan. 13, 2012). No comments were filed. Among other bands, Intelsat requests authority to operate Intelsat 22 on the same frequencies authorized to Intelsat 4, including the 12.25 -12.5 GHz frequency band. Neither Intelsat 706 nor 709 operates on the 12.25-12.5 GHz frequency band. We defer here any action on Intelsat’s replacement expectancy regarding the 12.25-12.5 GHz frequency band.

III. DISCUSSION

4. Although Intelsat filed its request under Section 25.161(c) of the Commission's rules, we find the request is more appropriately analyzed under the Commission's policy regarding replacement satellites. We therefore address the replacement policy first, and then address Intelsat's request under Section 25.161(c).

5. *Replacement Policy.* The Commission has consistently said that orbital assignments confer no permanent rights of use. It has, however, recognized the importance of giving satellite operators assurances that they will be able to continue to serve their customers from the same orbital location as older satellites are retired.¹⁰ Without this assurance, space station operators and their customers would be required to undertake the potentially disruptive and costly process of repointing antennas to space stations at different locations when older satellites are taken out of service. Thus, the Commission has stated it will generally authorize replacement satellites at the same orbital location as the older space station without considering competing applications.¹¹

6. The Commission defines a replacement satellite as one that is "authorized to be operated at the same orbit location, in the same frequency bands, and with the same coverage area as one of the licensee's existing satellites," and is "scheduled to be launched so that it will be brought into use at approximately the same time, but no later than, the existing satellite is retired."¹² Where a space station operator fails to replace a space station, the spectrum is made available to other parties for reassignment.

7. In situations where a satellite has a catastrophic in-orbit or launch failure, the Commission may authorize "emergency replacement" satellites without considering competing applications – even if there is some lapse in service. The Commission has authorized emergency replacement satellites in cases where the licensee has promptly filed an application to construct, launch, and operate a new satellite that will serve as a replacement, or has filed an application to move an in-orbit satellite into that location that will restore service promptly.¹³

¹⁰ Amendment of the Commission's Space Station Licensing Rules and Policies, *First Report and Order*, IB Docket No. 02-34, 18 FCC Rcd 10760, 10854-55 (2003) (*Space Station Licensing Reform Order*).

¹¹ See Assignment of Orbital Locations to Space Stations in the Domestic Fixed-Satellite Service, 3 FCC Rcd 6972, n. 31 (1988). See also Licensing of Space Stations in the Domestic Fixed-Satellite Service, 50 FR 36071, para 27 (Sept. 5, 1985); *Space Station Licensing Reform Order*, 18 FCC Rcd at 10854; GE American Communications Corp., *Order and Authorization*, 10 FCC Rcd 13775 at 13775-76 (Int'l Bur. 1995); and Loral SpaceCom Corp., *Order and Authorization*, 13 FCC Rcd 16348, 16440 (Int'l Bur., Sat. and Rad. Div. 1995).

¹² 47 C.F.R. § 25.165(e)(1) and (2).

¹³ See, e.g., Loral Spacecom Corp., *Order and Authorization*, 13 FCC Rcd 16438 (Sat. Div. 1998) (granted application filed in April 1997 requesting authority to launch and operate a ground spare as an emergency replacement for the Satcom IV satellite that suffered an in-orbit failure in January 1997); Volunteers in Technical Assistance, *Order*, 12 FCC Rcd 3094 (Int'l Bur. 1997) (granted application filed in January 1996 to launch and operate an emergency replacement satellite for the VITASAT-1 satellite that was destroyed by launch failure in August 1995; replacement satellite to be launched by March 1997); American Telephone and Telegraph Company, *Order and Authorization*, DA 95-1972, 10 FCC Rcd 12132 (Int'l Bur. 1995) (authorizing the launch and operation of Telstar 402R by December 1995, which was to serve as an emergency replacement satellite for the Telstar 402 satellite lost shortly after its launch in the fall of 1994); and Hughes Communications Galaxy, Inc., *Memorandum Opinion, Order and Authorization*, 8 FCC Rcd 5089 (1993) (granting Hughes's October 1992 application to (continued....))

8. Intelsat states that Intelsat 4's retirement in early 2010 was unanticipated. However, Intelsat has acknowledged that it expected the 15-year old satellite to reach its end-of-life later in 2010.¹⁴ This does not constitute the sort of catastrophic, in-orbit failure that is contemplated by the Commission's emergency replacement policy. Typically, the Commission has invoked the emergency replacement policy when a satellite fails during launch.¹⁵ Because satellites are generally expected to last about 15 years,¹⁶ and are extremely expensive and time-consuming to build and launch,¹⁷ satellite operators generally do not construct spare satellites that could be substituted for a failed satellite in the event of a launch failure. Accordingly, if a satellite fails during launch, we have allowed the operator to promptly move an in-orbit satellite into the vacant location or to promptly begin to construct a new satellite it will launch into that location without considering competing applications. Similarly, if a satellite fails early in its life, and before the operator could be expected to begin making plans for a replacement, we would allow the operator to retain a replacement expectancy in cases where it promptly restores service from that orbital location.

9. In contrast, Intelsat retired Intelsat 4 less than a year earlier than its anticipated end-of-life. Intelsat should have already been formulating plans for a replacement for Intelsat 4. Thus, Intelsat 4's retirement at the beginning of 2010 rather than at the end of 2010 does not invoke the emergency replacement policy. Further, because Intelsat 706 did not begin operating at 72° E.L. until mid-2010, there was a gap in service at this location. Nevertheless, we will treat Intelsat 706 as a replacement satellite. In this regard, we waive Section 25.165(e)(2) of the Commission's rules. Section 25.165(e)(2) defines a replacement satellite as a satellite that is scheduled to be launched and brought into use before the existing satellite is retired.¹⁸ We may grant a waiver pursuant to Section 1.3 of the Commission's rules if there is good cause for such action.¹⁹ Good cause may be found "where particular facts would make strict compliance inconsistent with the public interest."²⁰ To make this public interest determination, the waiver cannot undermine the purposes of the rule, and there must be a stronger public interest benefit in granting the waiver than in applying the rule.²¹ In addition, the Commission may take

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construct, launch, and operate an emergency replacement satellite by December 1994 to replace a satellite involved in a launch failure in August 1992).

¹⁴ Intelsat News Release, Feb. 1, 2010. Intelsat.com/press/news-release/2010/20100201-1.asp (last visited Mar. 8, 2012). See also Intelsat Corp. Form 10-K, Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2006, at 14 (filed Apr. 2, 2007).

¹⁵ See note 13, *supra*.

¹⁶ Amendment of the Commission's Space Station Licensing Rules and Policies, *First Report and Order*, 17 FCC Rcd 3847, 3895-96 (para. 143) (2002).

¹⁷ AtContact Communications, LLC, *Order*, 25 FCC Rcd 7567, 7573 (paras. 15-16) (2010).

¹⁸ 47 C.F.R. § 25.165(e)(2).

¹⁹ 47 C.F.R. § 1.3. See also *ICO Global Communications (Holdings) Limited v. FCC*, 428 F.3d 264 (2005); *Northeast Cellular Telephone Co. v. FCC*, 897 F.2d 1164 (D.C. Cir. 1990); *WAIT Radio v. FCC*, 418 F.2d 1153 (D.C. Cir. 1969).

²⁰ *Northeast Cellular*, 897 F.2d at 1166; *ICO Global Communications*, 428 F.3d at 269 (quoting *Northeast Cellular*); see also *WAIT Radio*, 418 F.2d at 1157-59.

into account considerations of hardship, equity, or more effective implementation of overall policy on an individual basis.²²

10. The purpose of the replacement expectancy is to ensure that operators will be able to continue to serve customers from the same orbital location as they retire older satellites.²³ Consequently, we authorize replacement satellites without considering competing applications. While there was a short gap in service triggered by Intelsat 4's earlier-than-anticipated retirement, Intelsat minimized disruption to its customers. Specifically, the C/Ku-band Intelsat 4 space station failed in January 2010 and was de-orbited in March 2010. Intelsat filed a request in April 2010 to move the C/Ku-band Intelsat 706 space station into the vacant location. Intelsat 706 began operating at 72° E.L. in August 2010. We authorized Intelsat 709 to operate at 72.10° E.L. in July 2011. Both Intelsat 706 and Intelsat 709 are currently operating at the nominal 72° E.L. orbital location. Further, Intelsat filed an application seeking authority to construct, launch, and operate a new space station to provide C-band and Ku-band service from the 72° W.L. orbital location, which it expects to launch shortly. Under these circumstances, we find that Intelsat has demonstrated a commitment to ensuring continuity of service at the nominal 72° E.L. orbital location. Further, it would be inequitable to penalize Intelsat for a gap in service in this situation. Intelsat needed to de-orbit Intelsat 4 earlier than expected, and re-initiated service from the vacated location within seven months of the failure and several months ahead of Intelsat 4's expected end-of-life. There has not been a gap in service since that time. Consequently, we find that a waiver of Section 25.165(e)(2) is warranted, and that Intelsat has retained its replacement expectancy to operate a space station in the 3700-4200 MHz, 5925-6425 MHz, 11.45-11.7 GHz, 12.5-12.75 GHz and 14.0-14.5 GHz frequency bands at the nominal 72° E.L. orbital location.

11. *Section 25.161(c)*. While we have analyzed Intelsat's request under the Commission's replacement expectancy policy, we recognize that Intelsat relied on Section 25.161(c) of the Commission's rules in its Petition requesting authority to leave the 72° E.L. orbit location vacant after the de-orbit of Intelsat 4. Section 25.161(c) states that a station authorization shall be automatically terminated upon "[t]he removal...of the facilities which renders the station not operational for more than 90 days, unless specific authority is requested."²⁴ Here, the Intelsat 4 space station was de-orbited at its end-of-life. Therefore, it is not possible to bring Intelsat 4 back into service. Consequently, Section 25.161(c) does not apply in this case.

12. Even assuming Section 25.161(c) could be applied in cases involving de-orbited satellites, this would not change the result. The Commission has stated that Section 25.161(c) is intended to avoid unacceptable lapses in service to customers, and to prevent warehousing of scarce orbit and spectrum resources.²⁵ These are the same considerations underlying the Commission's replacement
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²¹ See, e.g., *WAIT Radio*, 418 F.2d at 1157 (stating that even though the overall objectives of a general rule have been adjudged to be in the public interest, it is possible that application of the rule to a specific case may not serve the public interest if an applicant's proposal does not undermine the public interest policy served by the rule); *Northeast Cellular*, 897 F.2d at 1166 (stating that in granting a waiver, an agency must explain why deviation from the general rule better serves the public interest than would strict adherence to the rule).

²² *WAIT Radio v. FCC*, 418 F.2d at 1159; *Northeast Cellular*, 897 F.2d at 1166.

²³ See para. 5, *supra*.

²⁴ 47 C.F.R. § 25.161(c).

²⁵ *SES Americom, Inc., Order and Authorization*, 21 FCC Rcd 3430, 3434 (Int'l Bur. 2006).

expectancy policy.²⁶ Thus, because Intelsat had a concrete plan to reinstate service, and timely implemented its plan, there are no conflicts with the Commission's policy against spectrum warehousing.

IV. CONCLUSION AND ORDERING CLAUSES

13. Based on the foregoing, we find that Intelsat Licensee LLC has retained its replacement expectancy at the nominal 72° E.L. orbital location for the 3700-4200 MHz, 5925-6425 MHz, 11.45-11.7 GHz, 12.5-12.75 GHz, and 14.0-14.5 GHz frequency bands. Accordingly, IT IS ORDERED, that PanAmSat Licensee Corp.'s Petition is GRANTED.

14. This Order is issued pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and is effective upon release.

FEDERAL COMMUNICATIONS COMMISSION

Robert G. Nelson
Chief, Satellite Division
International Bureau

²⁶ In EchoStar Satellite Operating LLC, IBFS File No. SAT-MOD-20080825-00158 (granted Feb. 2, 2009), the Satellite Division cited Section 25.161(c) in authorizing EchoStar to restore service at the 148° W.L. orbital location using EchoStar 5 after the in-orbit failure of EchoStar 2. The Division used the same public interest analysis that is appropriate when considering whether an entity is entitled to retain a replacement expectancy at a vacated location. Because we would have reached the same result, the application of Section 25.161(c) in that case had no decisional significance and thus was harmless error. *See, e.g., Greater Boston Television Corp. v. FCC*, 444 F.2d 841 (D.C. Cir. 1970).